

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listing, of claims in the application:

1. (Amended): An isolated polynucleotide, comprising:
 - (a) at least one copy of a polynucleotide having the sequence set forth in SEQ ID NO:9;
or
 - (b) a polynucleotide which is a variant of the polynucleotide set forth in SEQ ID NO:9, wherein the variant hybridizes to SEQ ID NO: 9 or the complement of SEQ ID NO:9 ~~its complement~~ under 5x SSC and 42°C wash conditions and has a plant genetic insulator activity.
2. (Amended): The isolated polynucleotide of claim 1, wherein the variant comprises at least one copy of a polynucleotide having a sequence set forth in the group consisting of SEQ ID NOS:1, 5, 9, 10, 11, 12, 15, 16, 17, 18, 21, 22, 23, 24, 25, 26, 27, 28, 30, 31, 33, 34, 35 or 36.
3. (Previously Amended): A replicable vector comprising the isolated polynucleotide of claim 1.
4. (Previously Amended): The replicable vector of claim 3, wherein the vector is an expression vector.
5. (Previously Amended): The replicable vector of claim 3, wherein the vector is a plant vector.
6. (Amended): A host cell comprising the replicable vector of claim 3 ~~isolated polynucleotide of claim 1~~.
7. (Previously Amended): The host cell of claim 6, wherein the host cell is a plant cell.

8. (Previously Amended): A transgenic plant comprising the isolated polynucleotide of claim 1.
9. (Previously Amended): The plant of claim 8, wherein the plant is *Arabidopsis* or tobacco.
10. (Previously Amended): A transgenic seed comprising the isolated polynucleotide of claim 1.
11. (Amended): A recombinant polynucleotide, comprising:
 - (a) at least one copy of a polynucleotide having the sequence set forth in SEQ ID NO:9;
or
 - (b) a polynucleotide which is a variant of the polynucleotide set forth in SEQ ID NO:9, wherein said variant hybridizes to SEQ ID NO: 9 or the complement of SEQ ID NO:9 ~~its complement~~ under 5x SSC and 42°C wash conditions and has a plant genetic insulator activity.
12. (Canceled): A method for expressing a polypeptide in a plant cell, comprising the steps of:
 - (a) providing a vector comprising:
 - (i) at least one copy of either
 - (A) a polynucleotide having the sequence set forth in SEQ ID NO:9; or
 - (B) a polynucleotide which is a variant or fragment of the polynucleotide set forth in SEQ ID NO:9, wherein the variant or fragment has a plant genetic insulator activity; and
 - (ii) a structural polynucleotide coding for a polypeptide;
 - (b) inserting the vector into a plant cell, wherein the genetic insulator polynucleotide is recombined into the genomic DNA of the plant; and
 - (c) allowing the plant cell to express the polypeptide.
13. (Canceled): The method according to claim 12, wherein the genetic insulator polynucleotide is located immediately upstream of the polynucleotide encoding the polypeptide.

14. (Canceled): The method according to claim 13, wherein the plant is *Arabidopsis* or tobacco.
15. (Canceled): A method of making a recombinant plant cell having reduced variability of expression of a transgenic polypeptide therein, said method comprising:
- (a) providing a plant cell capable of regeneration;
 - (b) transfecting said plant cell with a polynucleotide construct comprising
 - (i) a genetic insulator polypeptide, comprising:
 - (A) at least one copy of a polynucleotide having the sequence set forth in SEQ ID NO:9; or
 - (B) a polynucleotide which is a variant or fragment of the polynucleotide set forth in SEQ ID NO:9, wherein the variant or fragment has a plant genetic insulator activity;
 - (ii) a transcription initiation region; and
 - (iii) a structural polynucleotide encoding a polynucleotide;
- wherein the genetic insulator polypeptide, the transcription initiation region and the structural polynucleotide are operatively associated;
- wherein the polynucleotide expression has a reduced variability as compared with a plant cell transfected with a polynucleotide construct that does not contain the genetic insulator polypeptide.
16. (Canceled): The method of claim 15, wherein expression of the transgenic polypeptide occurs in more of a plurality of the plant cells as compared to a plurality of the plant cells transfected with a polynucleotide construct that does not contain the genetic insulator polypeptide.

17. (Canceled): A method for insulating the expression of a transgenic polypeptide from *cis*-acting regulatory elements in the plant chromosome into which the polynucleotide coding for the expressed polypeptide has integrated, comprising:
- transfecting a plant cell with a polynucleotide construct comprising
- (a) a genetic insulator polypeptide, comprising:
 - (i) at least one copy of a polynucleotide having the sequence set forth in SEQ ID NO:9; or
 - (ii) a polynucleotide which is a variant or fragment of the polynucleotide set forth in SEQ ID NO:9, wherein the variant or fragment has a plant genetic insulator activity;
 - (b) a transcription initiation region; and
 - (c) a structural polynucleotide encoding a polynucleotide;
- wherein the genetic insulator polypeptide, the transcription initiation region and the structural polynucleotide are operatively associated;
- wherein the transfected polynucleotide construct integrates into a chromosome of the plant cell; and
- wherein the expression of the polypeptide from the integrated polynucleotide is insulated from *cis*-acting regulatory elements in the plant chromosome into which the polynucleotide coding for the expressed polypeptide has integrated.